

## **RHIC Beam Loss Monitor Configuration Control – MacKay, Ingrassia – 3/5/03**

### **Purpose**

- The purpose of this procedure is to outline the rules permitting changes to the RHIC beam loss monitor configuration. Configuration Control will consist of a review, conducted by appropriate accelerator physicists, before changes will be permitted to loss monitor masks and thresholds controlled by the *LossMonitor Thresholds* application or beam permit system inputs controlled via *pet/FEC/Instrumentation/bLms/blmPermit*.

### **Responsibility**

- The Run Coordinator and the Head of Machine Operations are responsible for reviewing proposed changes to the Beam Loss Monitor (BLM) configuration.
- The liaison physicist for each experiment is responsible for providing loss limits to be used as a reference for setting loss monitor thresholds for loss monitors in their IRs.
- The Beam Loss Monitor system cognizant physicist is responsible for making approved changes to the loss monitor configuration.
- The on duty Operations Coordinator (OC) is responsible for making changes to the Beam Permit. Inputs after following standard procedure.

### **Prerequisites**

- The beam loss monitor system is operational.
- The beam permit system is operational.

### **Precautions**

- Failure to follow the configuration control rules may lead to equipment activation, equipment damage, and decreased lifetime or degraded performance of experiment components.

### **Procedure**

- Disabling permit inputs for the BLMs is permitted following [C-AD OPM 5.30 “Verification and Operation of Beam Permit Links”](#). The procedure says that the OC may make changes after reviewing the consequences of the change with the systems specialist, or they make changes asked for by the Accelerator Division Head or his designee. For the purpose of this procedure the Operations Coordinator shall view the RHIC Run Coordinator and the Head of Machine Operations as the system specialist or Accelerator Division head designee referred to in OPM 5.30.
- Changes to BLM masks or thresholds must be reviewed by the Run Coordinator, or the Head of Machine Operations, and the BLM cognizant physicist.
- Phobos Protection
  - A list of BLM channels shall be determined in order to provide protection for the experiment.
  - The [Phobos] liaison physicist shall provide limits to the Run Coordinator and BLM cognizant physicist for each channel to be used to protect the experiment.
  - Phobos BLMs must not be disabled without permission from the Run Coordinator or the Head of Machine Operations, and the Phobos liaison physicist.

- Any and all configuration changes must be documented in the RHIC e-log for the current run.
- The OC must be notified of any changes to the BLM configuration and the OC shall make an entry in the OC e-log stating that the BLM configuration was changed.

**Documentation**

- RHIC e-log – BLM configuration changes.
- OC e-log – BLM configuration changes and beam permit system mask changes (as per OPM 5.30)

**References**

- None

**Attachments**

- None